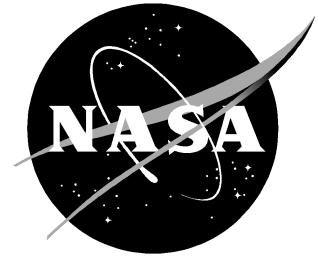


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Molecular Computers that Build Themselves?

Molecular electronic devices are inherently much smaller than their silicon counterparts and are not bound to the same manufacturing technologies. These new molecular gadgets need to be connected by molecular-scale wires. Molecular switches might also be used to perform roles similar to transistors in silicon integrated circuits.

Dr. Theresa S. Mayer, associate professor of electrical engineering, Penn State University, will speak on "Molecular Electronics and Directed Self-Assembly: Ultra-Small Computers that Build Themselves" at a colloquium at 2 p.m., Tuesday, July 10, at NASA Langley's H.J.E. Reid Conference Center.

Media Briefing: A media briefing will be held at 1:15 p.m. at the H.J.E. Reid Conference Center, 14 Langley Blvd., at NASA Langley Research Center. Members of the media who wish to attend should contact Kimberly W. Land (757) 864-9885.

Mayer will give an overview of the approaches being investigated that rely on directed self-assembly of nanometer-scale metal wires and carbon nanotubes to replace conventional photolithography.

Mayer received her bachelor's degree in electrical engineering from Virginia Tech in 1998 and her master's and doctorate degrees in electrical engineering from Purdue University in 1989 and 1993. In 1994, she joined the Department of Electrical Engineering at Penn State University, where she is an associate professor. Currently, she is on leave from Penn State serving as Director of Operations at the Molecular Electronics Corp.

The general public is invited to the Sigma Series lecture on the same topic at the Virginia Air and Space Center at 7:30 p.m., that evening.

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